

CLAIMS

1. A monoclonal antibody reacting specifically with a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1, or a salt thereof.

2. The monoclonal antibody according to claim 1, which reacts specifically with a peptide comprising at least one sequence selected from the amino acid sequences of the 8th to 9th, 11th, 15th, 17th, 21st, 23rd, 25th to 28th, 30th, 34th, 36th to 37th, 39th to 40th, 44th to 46th, 48th, 52nd-53rd, 55th, 64th, 66th, 68th, 70th to 73rd, 75th to 76th and 78th to 81st in the amino acid sequence represented by SEQ ID NO: 1.

3. The monoclonal antibody according to claim 1, which does not recognize a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 2 or SEQ ID NO: 3.

4. The monoclonal antibody according to claim 1, which is labeled.

5. The monoclonal antibody according to claim 1, which is shown by ZAL2-103a producible from the hybridoma shown by ZAL2-103 (FERM BP-8431).

6. The monoclonal antibody according to claim 1, which is shown by ZAL2-106a producible from the hybridoma shown by ZAL2-106 (FERM BP-8432).

7. The antibody according to claim 1, which has a neutralizing activity to a peptide having the amino acid sequence represented by SEQ ID NO: 1.

8. A pharmaceutical composition comprising the monoclonal antibody according to claim 1.

9. A diagnostic agent comprising the monoclonal antibody according to claim 1.

10. A method of quantifying a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1, which comprises using the monoclonal antibody according to claim 1.

11. A method of diagnosing a disease associated with a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1, or a salt thereof, which comprises using the monoclonal antibody according to claim 1.

12. A method of quantifying a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1, or a salt thereof in a test fluid, which comprises competitively reacting the monoclonal antibody according to claim 1 with a test fluid and a labeled form of polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1, or a salt thereof, and measuring a ratio of the labeled

polypeptide or a salt thereof bound to said antibody.

13. A method of quantifying a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1, or a salt thereof in a test fluid, which comprises reacting the monoclonal antibody according to claim 5 immobilized on a carrier, a labeled form of the monoclonal antibody according to claim 6 and a test fluid, and then assaying the activity of a labeling agent.

14. A method of quantifying a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1, or a salt thereof in a test fluid, which comprises reacting the monoclonal antibody according to claim 6 immobilized on a carrier, a labeled form of the monoclonal antibody according to claim 5 and a test fluid, and then assaying the activity of a labeling agent.

15. A hybridoma producing the monoclonal antibody according to claim 1.

16. The hybridoma according to claim 15, which is shown by ZAL2-103 (FERM BP-8431) or ZAL2-106 (FERM BP-8432).

17. A method of producing the monoclonal antibody according to claim 1, which comprises culturing the hybridoma according to claim 15 in vivo or in vitro and collecting the monoclonal antibody according to claim 1 from the body fluid or culture.

18. The pharmaceutical according to claim 8, which is an agent for the prevention and/or treatment of central nervous system disorders, motor dysfunction or endocrine diseases.

19. The diagnostic agent according to claim 9, which is a diagnostic agent for central nervous system disorders, motor dysfunction or endocrine diseases.

20. An antibody reacting specifically with the binding site of the antibody according to claim 1 against a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1.

21. An antibody reacting specifically with the binding site of the antibody according to claim 5 against a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1.

22. An antibody reacting specifically with the binding site of the antibody according to claim 6 against a polypeptide comprising the amino acid sequence represented by SEQ ID NO: 1.

23. A method of preventing and/or treating central nervous system disorders, motor dysfunction or endocrine diseases, which comprises administering to a mammal an effective dose of the antibody according to claim 1.

24. Use of the antibody according to claim 1 to manufacture an agent for the prevention and/or treatment of central nervous system disorders, motor dysfunction or endocrine diseases.